SOUTH DAKOTA
DEPARTMENT
OF HEALTH





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South Dakota 2003 Perinatal Risk Assessment Report

by Bev Duffel, Women's Health Manager, Department of Health

Every other year since 1997, the South Dakota Department of Health has conducted a survey of new mothers as part of its mission to ensure healthy women, children, and families. Mothers participating in the survey have infants ranging in age from newborn to eight months old. They respond to questions about behaviors prior to conception such as tobacco and alcohol use, health care and education during pregnancy, and infant health care and behaviors such as car-seat use and infant sleep positions. The survey is funded through the Maternal Child Health Block Grant.

The 2003 report is now available and some indicators show improvement. A summary of the report is available on the department web site at www.state.sd.us/doh/Stats/2003Perinatal.pdf. To request a printed copy of the full report contact Bev Duffel, Office of Family Health, Department of Health, at 605-773-3737.

Newborn Hearing Screening: In December of 1999, the Department of Health implemented the voluntary Newborn Hearing Screening Program in cooperation with South Dakota hospitals and audiologists. At that time, 42.2% of parents of newborns indicated their baby had a hearing test prior to leaving the hospital while 31.1% didn't know whether the test had been performed. In 2003, 80.7% of newborn parents said their baby had a hearing test before leaving the hospital while only 6% didn't know. A total of 89.1% of the infants born in 2003 had their hearing screened by the time they were one month old. Infants who are diagnosed with a hearing loss are referred to "Birth to Three Connections," the Early Intervention Program for Infants and Toddlers with Disabilities within the Department of Education Office of Special Education.

Folic Acid: Women of child-bearing age should consume 400 micrograms (0.4 milligrams) of folic acid to prevent spina bifida and other neural tube birth defects. Up to 80% of neural tube defects can be prevented if the mother has adequate folic acid levels one month before conception continuing through the first three months of pregnancy. Folic acid can be obtained by

taking a folic acid pill or multi-vitamin pill with folic acid or by consuming fortified foods with folic acid, primarily highly fortified cereals or fortified breads. In 2003, 53.1% of survey respondents indicated they took a vitamin that contained folic acid daily and only 5.8% didn't know they should. This is an improvement from 1999 when 41.6% of respondents had taken a vitamin daily and 12.8% didn't know they should. However, South Dakota has much work to do to reach the Healthy People 2010 goal of at least 80% of non-pregnant women aged 15-44 years consuming folic acid each day. It is important that all women of child-bearing age consume adequate folic acid as survey respondents indicated about half of pregnancies were not planned.

Weight gain: Adequate maternal weight gain is one way to prevent low birth weight babies. The 2003 report showed 18.5% of respondents did not gain the recommended amount of weight. This was an improvement from 1999 when 21.4% gained less than the ideal amount of weight. Gaining more than the recommended amount of weight, however, can mean the mother retaining extra weight postnatally and thus contributing to the obesity epidemic. In 2003 56.7% of the survey respondents gained more than the recommended amount, an increase from 40.3% in 1999.

Fish consumption: Fish can be an important part of a balanced diet for pregnant women as it contains high quality protein and other nutrients and is low in fat. However, some kinds of fish contain high levels of mercury that can harm an unborn child's developing nervous system if eaten regularly. Shark, swordfish, king mackerel or tilefish should never be eaten by women who are pregnant or could become pregnant, nursing mothers and young children as they contain higher levels of methyl mercury. The survey asked about fish consumption for the first time in 2003. Only 31.9% respondents remembered receiving information about eating certain kinds of fish. The report showed 44% of women ate fish during the last two months of their pregnancy but only 1% reported eating high-risk types of fish during pregnancy.

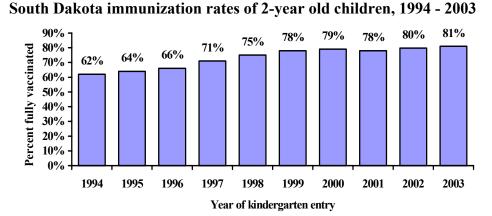
Sleeping Position of Infant: The American Academy of Pediatrics has recommended since 1992 that infants be placed to sleep on their backs to reduce the risk of Sudden Infant Death Syndrome (SIDS). Since then, the frequency of prone sleeping has decreased from >70% to approximately 20% nationally. In South Dakota, there has also been documented evidence that more parents are placing their babies on their backs to sleep. In 2003, 82.2% of parents responding to the survey indicated that their babies were placed to sleep on their backs. When the survey debuted in 1997, 53.3% reported their babies slept on their backs. This was followed in 1999 by 69.5% and 78.2% in 2001. The South Dakota Department of Health actively supports the Back to Sleep campaign and will continue to educate parents about this important strategy in reducing the number of SIDS deaths.

Prenatal Care: The Healthy People 2010 objective 16-16a is to increase maternal prenatal care beginning in the first trimester of pregnancy to 90%. In 2003, 89.9% of moms responding to the survey indicated that they began prenatal care in the first trimester. For those women that did not access prenatal care in the first trimester 22.5% said they did not know they were pregnant and 17.5% said their doctor did not want to see them until they were 12 weeks into pregnancy. Other reasons given for not seeking care earlier included not having insurance, not wanting anyone to know they were pregnant, or waiting to qualify for Medicaid before going for prenatal visits. Early and adequate prenatal care is promoted and encouraged through Department of Health programs. Pregnant women seen at Community Health Nursing sites are referred to providers of prenatal care and assisted with seeking financial resources such as Medicaid.

South Dakota 2003 Retrospective Immunization Survey

The National Infant Immunization Week theme is "Vaccination, an act of love." This annual observance emphasizes immunizing infants against vaccine preventable diseases, which is one of the most important ways parents can protect their children against serious disease.

South Dakota's annual immunization survey shows that 81% of the state's children entering kindergarten in fall 2003 were adequately immunized when they were 24 months old. Across the state 10,265 vaccination records from 395 schools were



Immunization Weel

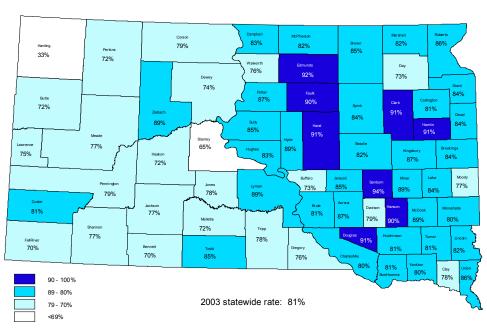
reviewed, with 8,266 of the children determined to have been fully immunized (81%) against diphtheria, tetanus, pertussis, polio, measles, mumps and rubella.

The statewide goal is 90% of 2-year old children with full immunization coverage. Sanborn County had the highest immunization rate in 2003 with 94% of their children fully immunized. Seven other counties achieved the 90% goal, Edmunds, Douglas, Hand, Clark, Hamlin, Hanson and Faulk. Thirty-four counties achieved 80-89% vaccination coverage. Only two counties had less than 70% coverage, Stanley and Harding.

Every year the immunization records of all children entering kindergarten are reviewed by

their local school to make sure they have all immunizations required by South Dakota law. The immunization rates reported are the percentages of this year's kindergarten students who were adequately immunized with 4 doses of DTaP (diphtheria, tetanus, pertussis), 3 doses of polio, and 1 dose of MMR (measles, mumps, rubella) by the time they were 24 months of age. This is called a retrospective survey.

Immunization Rates of 2-Year-Old Children By County, 2003



Overall State Rate 81%. Immunization rates based on a retrospective study of 10,265 South Dakota children entering kindergarten in Fall 2003 who were adequately immunized with 4 doses DTaP, 3 doses polio, and 1 dose MMR at 24 months of age.

This retrospective survey identifies communities with low immunization rates that may need targeted efforts to improve. Thanks to immunization, South Dakota was free of diphtheria, measles, mumps, rubella, tetanus, or polio in 2003. We had, however, 7 cases of pertussis (whooping cough).

Vaccines are among the most successful and cost-effective public health tools available for preventing disease and death. They not only help protect vaccinated children from developing serious diseases, they also help protect entire communities by preventing and reducing the spread of infectious disease.

Immunization schedules are available online at www.cdc.gov/nip or by calling the South Dakota Department of Health Immunization Coordinator (1-800-592-1861). The Department of Health also has vaccine record cards available.

Immunization rates of 2-year old children by County, 2003.

(Based on a retrospective study of South Dakota children entering kindergarten in 2003 who were fully immunized with 4 doses of DTaP, 3 doses of polio, and 1 dose of MMR when they were 24 months old.)

	Vaccination records	Children fully	
County	reviewed	Immunized	Percent
Aurora	31	27	87%
Beadle	199	164	82%
Bennett	64	45	70%
BonHomme	68	55	81%
Brookings	334	282	84%
Brown	412	350	85%
Brule	91	74	81%
Buffalo	44	32	73%
Butte	110	79	72%
Campbell	12	10	83%
Charles Mix	163	131	80%
Clark	46	42	91%
Clay	125	98	78%
Codington	313	253	81%
Corson	82	65	79%
Custer	78	63	81%
Davison	275	218	79%
Day	64	47	73%
Deuel	32	27	84%
Dewey	133	99	74%
Douglas	47	43	91%
Edmunds	51	47	92%
Fall River	76	53	70%
Faulk	40	36	90%
Grant	96	81	84%
Gregory	51	39	76%
Haakon	29	21	72%
Hamlin	69	63	91%
Hand	35	32	91%
Hanson	42	38	90%
Harding	12	4	33%
Hughes	241	199	83%
Hutchinson	103	83	81%

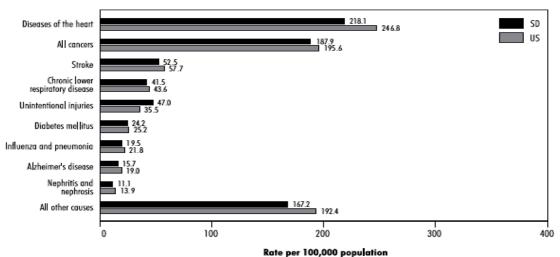
	Vaccination		
	records	Children fully	
County	reviewed	Immunized	Percent
Hyde	19	17	89%
Jackson	48	37	77%
Jerauld	20	17	85%
Jones	9	7	78%
Kingsbury	62	54	87%
Lake	147	123	84%
Lawrence	181	136	75%
Lincoln	295	241	82%
Lyman	57	51	89%
Marshall	50	41	82%
McCook	81	72	89%
McPherson	33	27	82%
Meade	191	147	77%
Mellette	39	28	72%
Miner	19	17	89%
Minnehaha	2293	1825	80%
Moody	57	44	77%
Pennington	1377	1086	79%
Perkins	32	23	72%
Potter	30	26	87%
Roberts	156	134	86%
Sanborn	33	31	94%
Shannon	357	274	77%
Spink	101	85	84%
Stanley	43	28	65%
Sully	20	17	85%
Todd	234	198	85%
Tripp	77	60	78%
Turner	98	79	81%
Union	200	171	86%
Walworth	63	48	76%
Yankton	256	205	80%
Ziebach	19	17	89%
TOTAL	10265	8266	81%

Chronic Disease Burden in South Dakota

By Mynna Kightlinger, SD Central Cancer Registry Coordinator

Chronic diseases are a burden on South Dakotans in both financial and societal terms. Heart diseases, malignant cancers, strokes, chronic lower respiratory disease¹ and diabetes account for approximately 70 percent of deaths both in South Dakota and in the United States. Chronic diseases are the most costly health problems and at the same time they are the most preventable.

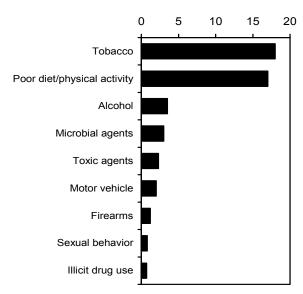
Causes of Death, South Dakota Compared With United States, 2001*



'Deaths per 100,000, age adjusted to 2000 total U.S. population.

Source: CDC Chronic Disease Burden 2004

Leading Causes of Death, US 2000*



Source: *Mokdad, A, Marks, J, Stroup, D and Gerberding, J. Actual Causes of Death in the United States, 2000.

help to prevent or control chronic diseases.

An aging population, tobacco use and obesity are contributing factors. In 2000 tobacco use, poor diet and physical inactivity and alcohol consumption were the top three causes of death in the United States. Actual causes of death are defined as lifestyle and behavioral factors such as smoking and physical inactivity which contribute to this nation's leading killers such as heart disease, cancer, stroke and diabetes.

Modest reductions of modifiable risk factors can have a large public health impact. Restricting access to tobacco and environmental changes providing better access to healthy foods and opportunities for physical activity are a few methods that can

¹ Includes bronchitis, emphysema, chronic obstructive pulmonary disease, asthma and related ICD J40-57

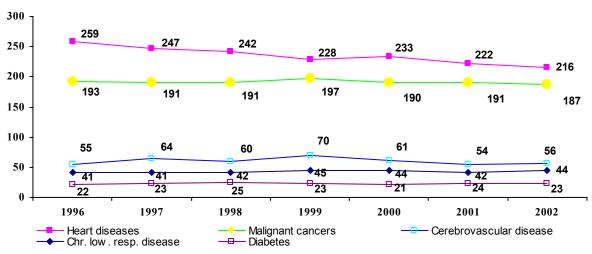
In 2002, the five most common chronic diseases in South Dakota were heart disease, malignant cancers, stroke, chronic lower respiratory disease and diabetes.

Deaths Due to Five Leading Chronic Diseases as a Percentage of All Deaths by Race,

	All races		Whites		American Indians	
Cause of Death	Death	Percent	Deaths	Percent	Deaths	Percent
	S					
Heart Diseases	1933	28%	1837	29%	94	19%
All cancers	1561	23%	1488	23%	70	14%
Stroke	518	7%	502	8%	14	3%
Chronic lower respiratory disease	382	5%	367	6%	15	3%
Diabetes	193	3%	158	3%	34	7%
Other	2299	33%	4352	68%	217	46%
Total	6886	100	6368	100	497	100

Source: South Dakota Department of Health

Age-Adjusted Mortality Rates* of Selected Chronic Diseases, South Dakota 1996-2002



 $Source: South\ Dakota\ Department\ of\ Health.\ \ *Rates\ are\ per\ 100,000\ adjusted\ to\ the\ 2000\ .U.S.\ Census\ Advisor of\ Part of$

Diseases of the Heart

Heart disease is the most common killer of South Dakotans and could be lowered by reducing prevalence rates of the major risk factors: high blood pressure, high blood cholesterol, tobacco use, diabetes, physical inactivity, and poor nutrition.

- Heart diseases, which killed 1,933 South Dakotans in 2002, accounted for 28 % of all deaths in the state.
- An equal percentage of males and females died from heart disease.
- South Dakota's 2002 age-adjusted heart disease mortality rate was 216 per 100,000.
- The median age of death was 83 years.
- The state's 1997- 2001 heart disease mortality rate was 231 per 100,000 persons, compared to 257 per 100,000 in the United States.
- For 1997-2001, the state's heart disease mortality rate was 342 per 100,000 for American Indians and 227 per 100,000 for whites.

Stroke or Cardiovascular Disease

Stroke is the third most common cause of death in South Dakota and the United States. It is also a major cause of disability. The major risk factors for stroke are high blood pressure, high blood cholesterol, tobacco use, heart disease, diabetes, physical inactivity and poor nutrition. A person's chance of having a stroke doubles with each decade of life after age 55. Thus, in order to improve the quality of life among older South Dakotans, and to reduce health care costs, it is important to prevent stroke and to control the risk factors.

- Stroke killed 518 or 7.5 percent of South Dakotans in 2002.
- More females than males die from stroke each year.
- The state's 2002 age adjusted stroke mortality rate was 55.8 deaths per 100,000 persons.
- The median age of death was 85 years.
- The state's stroke mortality rate for 1997- 2001 was 60 per 100,000 compared to 61 per 100,000 in the United States.
- For 1997-2001 the state's stroke mortality rate was 70 per 100,000 for American Indians and 58 per 100,000 for whites.

Cancers

Cancers are the second most common cause of death both in South Dakota and the United States. One in two men and one in three women will develop cancer in their lifetimes. Approximately 4,000 South Dakotans will be diagnosed with cancer in 2004. Risk increases with age. Cancer is largely controllable through modifying behavioral and environmental factors that increase cancer risk, and ensuring that cancer screening services and high quality treatment are available and accessible, especially to medically underserved populations. At least 30 % of all cancer deaths are caused by cigarette smoking and at least 35 % are caused by poor nutrition, sedentary lifestyle, obesity, and other lifestyle factors, and are thus preventable. The health care costs are enormous. The National Institute of Health estimated almost \$200 billion for cancer care in 2003.

- In 2002, cancer killed 1,561 South Dakotans accounting for 23% of all deaths in the state.
- More males than females are diagnosed and die from cancer each year.
- The age adjusted mortality rate for South Dakota in 2002 was 186.6 deaths per 100,000.
- The median age of death was 75 years.
- The state's cancer mortality rate for 1997- 2001 was 200 per 100,000 persons, compared to 191 per 100,000 nationally.
- For 1997-2001 the state's cancer mortality rate was 190 per 100,000 for whites and 221 for American Indians; national rates for the same period were 197 and 129, respectively.
- The top four cancers with the highest percentages of deaths in 2000 were lung 23%; colorectal -12%; breast -7%; prostate 7%.
- Lung cancer is the leading cause of cancer deaths in both men and women and accounts for 1 in 4 cancer deaths.

Cancer Incidence Age-Adjusted Rates by Race, South Dakota and U.S., 2000

Race	South Dakota Rate +			US SEER Rate *		
	Total	Males	Females	Total	Males	Females
All Races	376.4	419.8	347.7	472.9	460.2	413.8
White	344.5	385.5	317.2	478.9	558.0	426.8
Black	400.9	430.5	348.3	512.4	689.7	394.0
American Indian	407.5	460.0	378.1	Not available	Not available	Not available

Note: Rates are per 100,000 persons, age-adjusted to 2000 U.S. standard population.

Source: + South Dakota Department of Health; * SEER Cancer Statistics Review 1975-2000

Cancer Mortality Age-Adjusted Rates by Race and Ethnicity, South Dakota and U.S., 2000

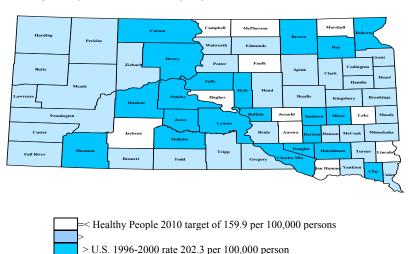
	South Dakota ⁺			U.S. SEER Rate*		
Race						Femal
	Total	Males	Females	Total	Males	
All Races	190.8	235.4	160.9	199.6	249.8	167.3
White	189.2	233.1	160.1	199.1	249.5	166.9
American Indian/Alaskan						
Native	246.3 ▲	304.7▲	207.2▲	129.3	158.1	109.4

Note: Rates are per 100,000 persons, age-adjusted to 2000 U.S. standard population

▲ State rate is significantly higher than the national rate ■ State rate is significantly lower than the national rate Source: + South Dakota Department of Health; * SEER Cancer Statistics Review 1975-200

The following map illustrates the age-adjusted mortality rates in South Dakota counties when compared to the Healthy People 2010 objective of 159.9 cancer deaths per 100,000 persons.

Cancer age-adjusted mortality by counties in South Dakota, 1996-2000



Mortality rates over the five-year period 1996-2000 showed that the South Dakota American Indian lung cancer rate is more than 1.5 times the white rate. For colorectal cancer the overall rate and the white rate for the same period were significantly higher than the national rates.

Note: South Dakota's rate is 189.7 per 100,000 + South Dakota Department of Health

Age-Adjusted Mortality Rates for Selected Sites, South Dakota and the US, 2000 and 1996-2000

		2000			1996-2000		
	Total	White	American Indian	Total	White	American Indian	
Lung	47.9▼	46.3 ▼	90.7▲	48.8▼	47.7▼	78.5 ▲	
Colorectal	24.4 ▲	24.6▲	23.9	23.2 ▲	23.1 ▲	25.3	
Breast	27.9	28.9	13.8	24.6	25.0	17.6	
Prostate	29.3	29.31	28.9	32.3	30.6	32.0	

Note: ▼ Significantly lower than the national rate. ▲ Significantly higher than the national rate.

Rates are per 100,000 persons, age-adjusted to 2000 U.S. standard population.

Source: + South Dakota Department of Health;

SEER Cancer Statistics Review 1975-2000

The South Dakota annual percent change for 1996-2000 showed increases for all sites, for breast and colorectal among whites and lung and for bronchus among American Indians.

Annual Percent Change in Age-Adjusted Mortality Rates of Top 3 Cancers, SD 1996-2000

	All races	White	American Indian
All malignant cancers	0.1	0.3	-2.4
Colorectal	2.0	2.7	-16.7
Lung and Bronchus	-2.4	-2.4	0.4
Breast	2.1	3.0	-17.0

Diabetes

In 2002, diabetes was the seventh leading cause of death in South Dakota. In 2001, it ranked sixth both in South Dakota and nationally. Diabetes is an increasingly common illness that can progress to cause devastating complications such as heart disease, leg and foot amputations, kidney failure and blindness. Its costs are enormous. Early detection, better self management and improvements in care are key strategies for preventing much of the burden of diabetes.

- Nationally, about 18 million people have been diagnosed with diabetes and an estimated 5 million more are undiagnosed.
- An estimated one in three persons born in 2000 will develop diabetes in their lifetime.
- Deaths by diabetes are believed to be under-reported.
- The age-adjusted mortality rate in South Dakota for 2002 was 23.0 deaths per 100,000.
- For 1997-2001, the age adjusted diabetes mortality rate in South Dakota was 102 deaths per 100,000 for American Indians and 19.7 per 100,000 persons for whites.
- 6.1% of South Dakotans reported that they were told by a physician that they had diabetes according to the 2001 Behavioral Risk Factor Surveillance System.

Risk Factors and Preventive Services among Adults 2001-2002 Behavioral Risk Factor Surveillance System *Smoking 2002*

- 23% of South Dakotans and 23% nationwide currently smoke cigarettes.
- 21% of whites and 39% of American Indians in South Dakota currently smoke cigarettes.
- The Healthy People 2010 Objective is 12 %.

Nutrition, Physical Activity and Obesity 2002

- 70% of men and 51% of women were overweight according to self reporting of weight and height.
- 85 % of men and 74% of women reported eating fewer than five servings of fruits and vegetables per day.
- 33% of American Indians and 23% of whites reported no leisure time physical activity.
- The Healthy People 2010 objective is to reduce the proportion of persons who engage in no leisure time physical activity to 20%.

Alcohol 2001

• 21% of South Dakotans had ≥ 5 drinks on one or more occasions in the past month.

Mammograms for Breast Cancer 2002

- 80 % of women over 50 years had a mammogram within the preceding two years, above the Healthy People 2010 Objective of 70%.
- 92% of women had a clinical breast examination.

Pap Smear for Cervical Cancer 2002

- 95 % of women 18 years and older have had a Pap smear, just below the Healthy People 2010 objective of 97%.
- 88% of women over 18 years had a Pap smear within the preceding 3 years, again just below the Healthy People 2010 target of 90%.

Colorectal Cancer Screening 2002

- 31% of South Dakotans age 50 years and over reported having had a fecal occult blood test (FOBT). The Healthy People 2010 objective is for 50% of this age group to have had a FOBT within the preceding two years.
- 31% of South Dakotans adults age 50 and over reported having a colonoscopy, well below the Healthy People 2010 target of 50%.
- Among adults 50 years and over, 38% of American Indians and 40% of whites reported having a sigmoidoscopy or colonoscopy within the past 5 years.

High Blood Pressure and Cholesterol 2001

- 30% of whites and American Indians reported having high blood pressure
- 70% of South Dakotans reported having a cholesterol check within the preceding 5 years.
- 24% of whites and American Indians reported having high cholesterol

Risks among High School Students

CDC Youth Risk Behavior Surveillance System, 2003

- 27% of high school students had physical education classes one or more days per week.
- 93% participated in vigorous or moderate physical activity during the past 7 days.
- 17% of students ate five or more servings per day of fruits and vegetables during the 7 days preceding the survey.
- 52% of students described themselves as about the right weight.
- 9% of students described themselves as being overweight.
- 38% of students reported drinking 5 or more drinks in a row or one or more in the past 30 days.
- 30% of students reported smoking cigarettes during the past 30 days.

South Dakota School Height and Weight 2004

These results are from a voluntary survey conducted during the 2002-2003 school year among school children in South Dakota

- 3% of students were below the fifth percentile for height for age.
- 2% were underweight described as a body mass index below the fifth percentile for age and gender.
- 16.7% of students were at risk for overweight and 16.6% were overweight, defined as a body mass index above the 95 percentile. The Healthy People 2010 target is 5%.
- 31% of white children, 41% of American Indian children, 38% of other races and 38% of unknown race children were either overweight or at risk for overweight.

National HIV/AIDS Prevention Grants Program Announced

The United States Conference of Mayors (USCM), in cooperation with the National Center for HIV, STD and TB Prevention (NCHSTP), invites proposals to strengthen local capacities to carry out effective HIV/AIDS prevention activities through its HIV/AIDS Prevention Grants Program.

Proposals will be accepted for two tracks:

- Track one proposals are to address implementation of HIV/AIDS prevention services targeting Native Americans; and
- Track two proposals are to address the implementation of HIV/AIDS prevention services targeting gay/bisexual men of color.

USCM plans to award grants totaling \$530,000 to local health departments, community-based organizations and Native American tribes/nations for implementation of HIV/AIDS prevention projects targeting these two populations. Approximately \$180,000 of that amount will be allocated to three grants of \$60,000 each for Native Americans; the remaining \$350,000 will be allocated to five grants of approximately \$70,000 each for gay/bisexual men of color.

Interested applicants should download the application packet at http://usmayors.org/hivprevention/rfp2004.pdf. The application deadline is Monday, May 24.